

Integrated Water Quality and Aquatic Communities Protocol – Mountain Lakes and Ponds

Standard Operating Procedure (SOP) #14: Photo Management

Draft Version 1.0

Revision History Log:

| Previous Version | Revision Date | Author | Changes Made | Reason for Change | New Version |
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This SOP includes instructions for managing photos taken for the lakes and pond monitoring protocol. This SOP is adopted from the Klamath Network Landbird Monitoring Protocol.

Introduction

This document covers photographic images collected by the Project Lead and field crew during the course of conducting project-related activities.

Care should be taken to distinguish data photos from incidental or opportunistic photos. Data photos are those taken for at least one of the following reasons:

1. To document a particular feature or perspective for the purpose of site relocation.
2. To capture site habitat characteristics and to indicate gross structural changes over time.
3. To document species detection.
4. To document field crew activities during surveys and site set up (human interest, methods, and aesthetic photos are encouraged).

It is the responsibility of the Project Lead to ensure images are properly named and stored in the correct location along with the image metadata as described below.

Photo Metadata

The Klamath Network Data Plan (Mohren 2007) specifies the required metadata for photo management. As part of the field datasheet (Appendix F), the required metadata is recorded for all site photos. The required metadata that must be recorded by the crew taking the photos are:

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- **Photo name**
- **Date photo taken**
- **Name of photographer**
- **Description of photo**
- **Site name**
- **Coordinates (if available)**

Other required metadata (Table 1) (e.g., Category Folder, Rights, Publisher, etc.) are automatically populated by the Data Manager.

Photo name is the file name assigned by the camera (e.g., RIMG0001). Do not include the extension in the file name.

Date photo taken is self explanatory, but should be in the format mm/dd/yyyy. Note that this is different from other protocol procedures (yyyymmdd), but is in this format to comply with photo metadata standards.

Name of photographer is also self explanatory, but full name should be given (i.e., not just initials).

Description of photo should be as detailed, clear, and concise as possible. When entering into the database, caption descriptions are acceptable but keep grammar correct.

Acceptable examples:

- Lake Helen, looking west.
- Aaron Maxwell holding unknown tadpole at Reflection Lake.
- Black bear seen on trail from Cliff Lake, during field crew hike out.

UNACCEPTABLE examples

- L. Helen, west
- Tadpole?
- Bear on trail

Downloading and Processing Procedures

Downloading and processing procedures are detailed in SOP #12: Post-Site Tasks.

Metadata for the images is entered during the data entry phase (SOP #13: Data Entry).

Deliver Image Files for Final Storage

It is the Project Lead's responsibility to compile all images into a common folder and to transfer processed images to the Data Manager (SOP #17: Data Transfer, Storage, and Archive).

To transfer images from computers and to transfer the compiled set of images to the Klamath Network Data Manager, copy the folder for the appropriate year images onto a CD, DVD, or flash drive for delivery. These files will be stored in the Lakes_Images folder, a sub folder of the Water Quality Monitoring folder located on the Klamath

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Network server. Copies of the images will be placed in the Klamath Network Image Library. Metadata for the images will be loaded into the Klamath Network Image Database, which is linked to the photographs in the Klamath Network Image Library. Images and metadata will be backed up and archived following the methodologies outlined in the Klamath Network Data Management Plan (Mohren 2007). Mohren (2007) should be consulted for additional information on photo management.

Literature Cited

Mohren S. R. 2007. Data management plan, Klamath Inventory and Monitoring Network. Natural Resource Report NPS/KLMN/NRR—2007/012. National Park Service, Fort Collins, CO.

Table 1. Complete list of fields required for photo metadata. Some of these fields are autopopulated by the Data Manager (e.g., Rights, Category Folder, and Publisher).

| *Park Code | *Network Code | Project | *Photo Name | *Date | *Photographer | *Description | UTM East | UTM North | Datum | *Category Folder | *Ext. | *Rights | Collection | Publisher | Resource Type |
|------------|---------------|---------|-------------|-------|---------------|--------------|----------|-----------|-------------------|------------------|-------|---------|------------|-----------|---------------|
| | KLMN | Lakes | | | | | | | NAD 83 Zone 10 | | .jpg | | KLMN | NPS | Image |
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| | KLMN | Lakes | | | | | | | NAD 83 Zone 10 | | .jpg | | KLMN | NPS | Image |

1) * Required fields.

2) Populated fields are populated with their default values as shown above.

3) Fields include:

Park Code – CRLA, LAVE, LAVO, ORCA, REDW, WHIS.

Network Code – KLMN.

Project – Name of the project you are working on.

Photo Name – Name of the photograph, do NOT include the extension.

Date – Date the photograph was taken in the format MM/DD/YYYY.

Description – A DETAILED description of the photograph, including the name of the site, if applicable.

UTM East and North – The UTM coordinates where the picture was taken, if applicable.

Datum – The datum and zone for the UTM coordinates. The default is NAD 83 Zone 10.

Category Folder – The name of the folder where the picture is being stored.

Ext. – The extension; the KLMN requires photographs to be in .jpeg format.

Rights – Right for use or dissemination. Generally, rights are “Public,” except for sensitive species, children, etc.

Publisher – Owner of the photograph, usually NPS.

Resource Type – What is it? Image, PPT, Graphic; usually Image.